



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/657,030      | 09/07/2000  | Rodney Schulz        |                     | 1245             |

7590 07/29/2004  
James N Videbeck  
Terrace Executive Center  
Court C  
1 S 376 Summit Avenue  
Oak Brook Terrace, IL 60181

EXAMINER

ONUAKU, CHRISTOPHER O

ART UNIT PAPER NUMBER

2616

DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/657,030

Applicant(s)

SCHULZ, RODNEY

Examiner

Christopher O. Onuaku

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 3 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 September 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner. *Draftperson (see PTO-948)*
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

Art Unit: 2616

### DETAILED ACTION

1. Please include the new Art Unit 2616 in the caption or heading of any written or facsimile communication submitted after this Office Action because the Examiner, who was assigned to Art Unit 2615, will be assigned to new Art Unit 2616. Your cooperation in this matter will assist in the timely processing of the submission and is appreciated by the Office.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis (US 6,504,990) in view of Hendricks et al (US 6,539,548).

Regarding claim 1, Abecassis discloses systems for, and methods of, processing, random accessing, buffering, and playing a video utilizing segment information, where the source of the video is, for example, a DVD, a DBS, and/or video-on-demand transmission, and where the means for playing the video comprises, for example, a DVD player, a personal computer, a set-top-box, and/or a multimedia player,

Art Unit: 2616

comprising the method steps of dividing an HDTV signal program into a plurality of blocks of data, placing blocks identifying data on each block sequentially, identifying a first block as an initiating (beginning or starting) block in a looping program, identifying a second block displayed later in the program than the first block as a finishing (ending) block in a looping program, playing the program from the first block of data through the second block of data, instructing the playing of the program that the first block is to be displayed substantially immediately after the second block of data played (i.e., continuous looping operation) (see col.45, lines 44-54; col.66, lines 23-46; col.67, lines 4-62; and col.67, line 63 to col.70, line 3), here Abecassis discloses the seamless continuous looping operation of clearly defined, marked and identified video segments for continuous of the video segments as required by the viewer. The viewer can mark the beginning and end of each of the segments in the loop, and can determine when the looping display ends. Also the actual size of the segments depends on the viewer's preference, including making the size of the segments to be equal, if desired.

Abecassis discloses processing digital signals for the seamless continuous looping operation, as discussed above. Further Abecassis discloses where using the source of video is a DVD or a DBS and where the playing of video comprises a DVD player, for example. However Abecassis fails to explicitly disclose processing HDTV signal for the looping operation.

Hendricks et al teach television entertainment delivery systems that provide television programming to consumer homes, including an Operation Center that organizes and packages cable television programming for delivery to consumer homes,

Art Unit: 2616

including an Operation Center capable of offering interactive television, high definition television (HDTV) or/or advanced television features. And within the Operation Center, stored programs must be accessed using banks of looping tape machines. For example, in the movie category, which has the greatest allocation of channels, the same movie may be shown continuously and simultaneously on different channels. Each channel starts the movie at a different time allowing the subscriber to choose a more suitable movie starting time, e.g., every 15 minutes (col.4, lines 31-34; col.14, line 55 to col.15, line 7; line 31, lines 7-15 and col.46, lines 26-38).

It would have been obvious to modify Abecassis by adding HDTV signals, as taught by Hendricks, to the Abecassis system in order, for example, to apply the HDTV signals in the program looping processing of Abecassis.

Furthermore, Abecassis fails to explicitly disclose dividing an HDTV signal program into a plurality of substantially equal blocks of data. However, since Abecassis discloses that the actual size of the segments (blocks) depends on the viewer's preference, including making the size of the segments to be equal, if desired (see discussions above), Abecassis modified with Hendricks, it would have been obvious to divide the HDTV signal program into a plurality of substantially equal size blocks (segments) of data, in order, for example, to satisfy a viewer's preferential requirement.

#### ***Allowable Subject Matter***

4. Claims 2&3 are allowable over the prior art of record.

Art Unit: 2616

5. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 2, the invention relates apparatus and methods for receiving and storing and sending HDTV (high definition television) signals, including an apparatus and method for providing a continuous looping play features while transmitting those signals to display television in retail store outlets.

The closest references Abecassis (US 6,504,990) discloses systems for, and methods of, processing, random accessing, buffering, and playing a video utilizing segment information, where the source of the video is, for example, a DVD, a DBS, and/or video-on-demand transmission, and where the means for playing the video comprises, for example, a DVD player, a personal computer, a set-top-box, and/or a multimedia player, and Hendricks et al teach television entertainment delivery systems that provide television programming to consumer homes, including an Operation Center that organizes and packages cable television programming for delivery to consumer homes.

However, Abecassis and Hendricks et al fail to explicitly disclose a method of storing and continuous looping transmission of digital HDTV signals, where the method comprises the steps of providing constant flow of digital HDTV signals from the first in, first out registers to an 8-VSB modulator, converting the digital HDTV signal into one of 8 voltage levels for providing a base band signal that is used to modulate a radio frequency carrier, choosing one of the blocks of digital HDTV signals to be a start block and another one of the blocks of HDTV signals to be a finish block in a program to be

Art Unit: 2616

transmitted, playing the blocks of digital HDTV signals from the start block to the finish block, and continuously playing the blocks of digital signals in identified order with the start block positioned after the finish block in playing order.

Regarding claim 3, the invention relates apparatus and methods for receiving and storing and sending HDTV (high definition television) signals, including an apparatus and method for providing a continuous looping play features while transmitting those signals to display television in retail store outlets.

The closest references Abecassis (US 6,504,990) discloses systems for, and methods of, processing, random accessing, buffering, and playing a video utilizing segment information, where the source of the video is, for example, a DVD, a DBS, and/or video-on-demand transmission, and where the means for playing the video comprises, for example, a DVD player, a personal computer, a set-top-box, and/or a multimedia player, and Hendricks et al teach television entertainment delivery systems that provide television programming to consumer homes, including an Operation Center that organizes and packages cable television programming for delivery to consumer homes.

However, Abecassis and Hendricks et al fail to explicitly disclose a method of re-clocking digital HDTV signals and preparing same for continuous looping play, where the method comprises the steps of filling two concurrent blocks of computer system memory with 32 bit wide digital HDTV signals and identifying the signals making up each distinct block thereof, distributing the 32 bit wide digital HDTV signal across four 8-

Art Unit: 2616

bit first in, first out registers by a bus master device via a bus, dividing each first in, first out registers into two sections, refilling each section as each register transitions a half full boundary, and providing a constant predetermined rate and width digital HDTV signal sequentially in identifiable predetermined sized blocks of such signals from each of the four 8-bit first in, first out registers

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Florin et al (US 5,594,509) teach a system for selectively viewing and interacting with programs and services from a number of program/service sources, a control device for controlling the system, and the methods and apparatus incorporated in the system for managing selection, viewing, and interacting with the program/service offerings.

Kram (US 6,112,007) teaches television picture displays, including an apparatus that allows for the redisplay of any viewed television image within a variable time period of short duration.

Lane et al (US 6,141,486) teach digital video recording, including digital video recorders such as video tape recorders (VTRs) capable of recording and/or reproducing recorded video images stored in the form of compressed digital data for use during fast forward, search, and reverse modes of video recorder playback operation.



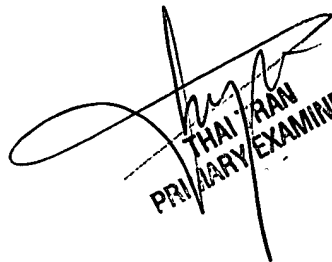
Art Unit: 2616

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher O. Onuaku whose telephone number is (703) 308-7555. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Acting supervisor, Thai Tran, can be reached on (703) 305-4725. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
COO  
7/23/04

  
THAI TRAN  
PRIMARY EXAMINER